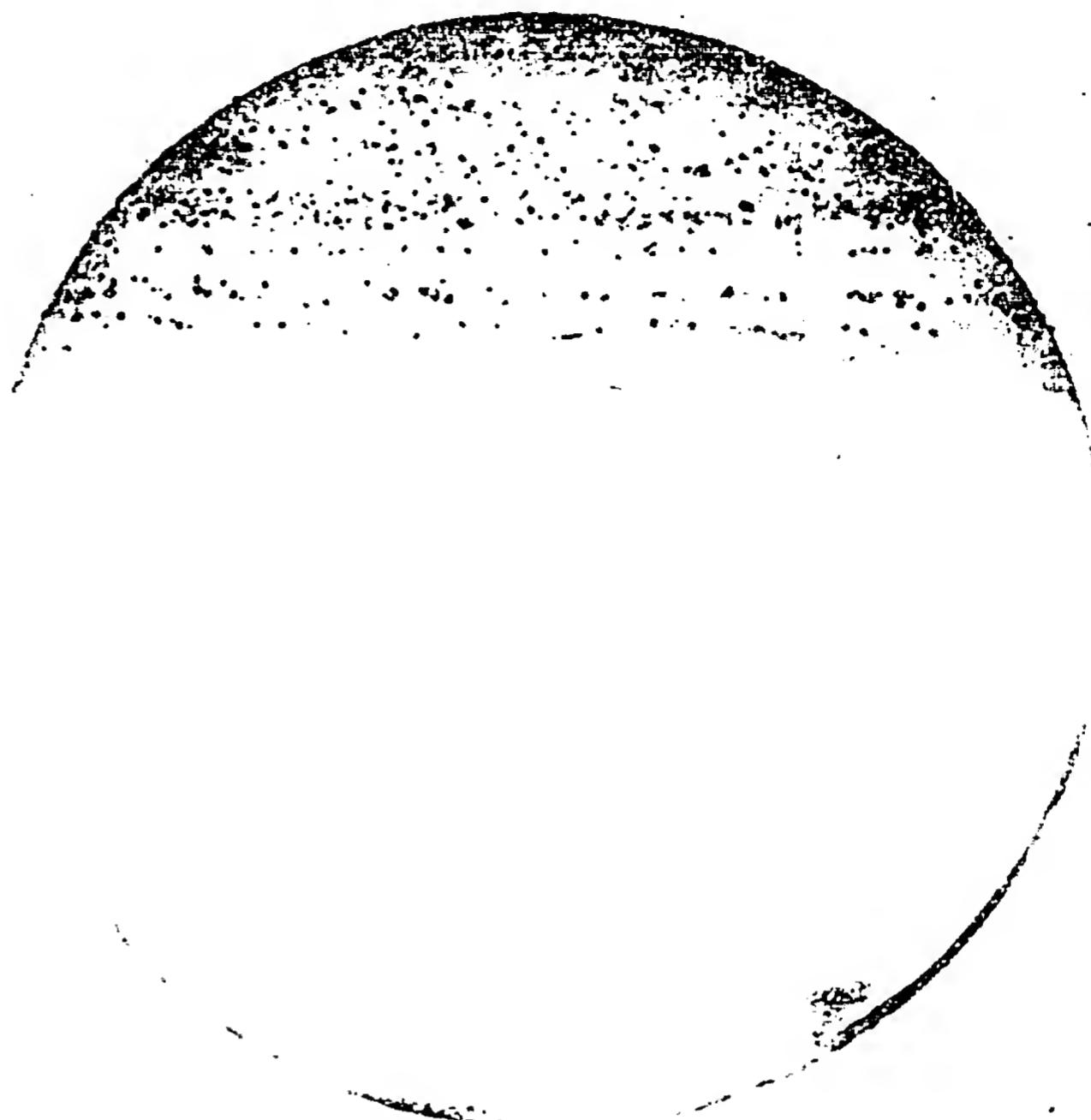


CHIEF STAFF SHUTTLE SUPPORT
OPERATIONS PLAN 3410-81



(S)

6 MARCH 1981

OPR: HQ ADCOM/J-3XS

DEPARTMENT OF DEFENSE
HEADQUARTERS AIRSPACE DEFENSE COMMAND
FORTRESS AIR FORCE BASE, COLORADO 80444

TO
J-3X

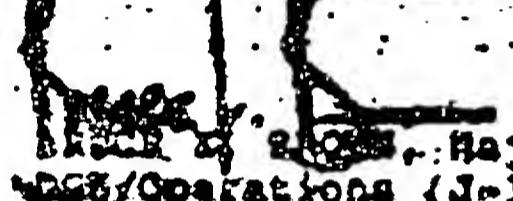
6 March 1981

FROM CINCAIR OPLAN 3410-81

10 See Distribution (Annex 3)

Enclosed herewith is CINCAIR OPLAN 3410-81 which provides for AFSCOM support to ~~AFSCOM~~ during various phases of the Space Shuttle mission.

FOR THE COMMANDER IN CHIEF



1 Atch
CINCAIR OPLAN 3410-81,
6 March 1981

HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1981

CINCAO OPLAN 3410-81
PLAN SUMMARY

1. PURPOSE. OPLAN execution will provide support to NASA during the various phases of the Space Shuttle mission. When implemented, this plan provides for the basic support concepts contained in the Department of Defense (DOD) Overall Plan for Space Shuttle Operations (Orbital Flight Test) and the Department of Defense Manager's Space Shuttle Support Operations Plan (Orbital Flight Test).
2. CONDITIONS FOR IMPLEMENTATION. Execution of this plan will be directed by CINCAO prior to the first Space Shuttle OFT mission. It shall remain in effect throughout the life of the Space Transportation System. Implementation of this plan will be accomplished through publication of a CINCAO Space Shuttle Support Implementation Plan thirty days prior to the first Space Shuttle OFT mission.
3. OPSEC. To protect information revealing operational capabilities of ADCOM, information contained herein will be disseminated only to those agencies and personnel whose official duties specifically require knowledge of this plan.

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HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1981

SINCAO OPLAN 3430-81
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HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1981

CINCAD OPLAN 3410-81
ACRONYMS/ABBREVIATIONS

ADCOM	Aerospace Defense Command
ADIC	Aerospace Defense Command Intelligence Center
ASCC	Alternate SPACE Computation Center, Eglin AFB FL
AUTODIN	Department of Defense Automatic Digital Information Network
AUTOSEVOCOM	Department of Defense Automatic Secure Voice Network
AUTOVON	Department of Defense Automatic Voice Network
BCF	Backup Computational Facility, Dahlgren, VA
CINCAD	Commander-in-Chief, Aerospace Defense Command Colorado Springs, CO
COMBO	Computation of Miss Between Orbits
CONUS	Continental United States
CP	ADCOM Command Post
CSS	Communications System Segment
DDMS	Department of Defense Manager's Space Shuttle Support Office, Patrick AFB FL
DOY	ADCOM Space Operations Directorate (ADCOM J-37)
EDDET	Early Orbit Determination
ET	External Tank
FRAG, O&C	Fragmentary Order
ILAM	Initial Launch Alert Message
JSC	Johnson Space Flight Center, Houston TX
L ₊ or L ₋	Landing time referenced minus or plus with minutes, hours, or days
MCC	Mission Control Center, Johnson Space Center, Houston TX
MWC	Missile Warning Center
NASA	National Aeronautics and Space Administration, Washington DC
OAL	Orbital Analyst Leader
OASD/PA	Office of the Assistant Secretary of Defense, Public Affairs
OFT	Orbital Flight Test

OPLAN	Operations Plan
OPSEC	Operations Security
OV	Orbiter Vehicle
SCC	SPADOC Computation Center
SITREPS	Situation Reports
SLF	Shuttle Landing Facility, Kennedy Space Center FL
SPADATS	Space Detection and Tracking System
SPADOC	Space Defense Operations Center
SRB	Solid Rocket Booster
SSC	Space Surveillance Controller
STS	Space Transportation System
SVO	Space Surveillance Officer
Δ (- or +)	Launch time referenced minus or plus with minutes, hours, or days
TIP	Tracking and Impact Prediction

HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1981

CINCAD OPLAR 3410-81
CINCAD SPACE SHUTTLE SUPPORT OPERATIONS PLAN 3410-81

REFERENCES:

- a. Department of Defense Overall Plan for Space Shuttle Operations (Orbital Flight Test), 24 August 1979
- b. Department of Defense Manager's Space Shuttle Support Operations Plan (Orbital Flight Test), 15 July 1980
- c. Mission Operations Systems Plan
- d. Shuttle Operation Concept, DOD, STS, Draft, March 1979
- e. MOA Goddard Space Flight Center (GSFC) and NORAD, 15 June 1965
- f. SECDEF Memo, 16 March 1977, "Assignment of Responsibilities of the Department of Defense Manager for Space Shuttle Support Operations"
- g. System Operational Concept for the Space Defense Operations Center (SPADOC), 2 June 1980
- h. Assistant SECDEF (ASD/C3) letter to CINCAD, 1 March 1979.
- i. ACCOM/JSC MOA for Space Defense Operations
- j. Applicable DOD 9230 series Directives and USAF and ACCOM 130 series Regulations, Manuals, and Supplements
- k. NASA/JCS Requirements for NORAD/ACCOM Support of STS-1, 26 Nov 80.

TASK ORGANIZATION: ANNEX A

1. SITUATION. The National Aeronautics and Space Administration (NASA) with Department of Defense (DOD) participation, is developing a national Space Transportation System to provide the United States the capability to deliver payloads of personnel, equipment, supplies and other spacecraft to and from space. The design, development, test and evaluation phase of the Space Shuttle Program is well underway. A series of Space Shuttle Orbiter Approach and Landing Tests have been completed at Edwards Air Force Base, CA. The next major Space Shuttle Flight test activities will consist of a series of Orbital Flight Test (OFT) missions scheduled for the FY 1981-1982 period. NASA is responsible for the OFT program. This plan identifies the support ACCOM is tasked to provide for space shuttle operations. This plan will be amended to include future NASA requirements requiring ACCOM support.

2. MISSION. To provide NASA support as specified under already existing missions and special support as specifically requested by NASA.

3. EXECUTION.

Concept of Operations. ACCOM will provide operational support specified in ANNEX C during the execution phase of Shuttle missions.

(i) General. This plan will be executed upon direction from CINCAD. The Space Operations Directorate (J-3Y) will be the prime point-of-contact for all shuttle operational support provided by ACCOM and will develop and publish a CINCAD Space Shuttle Support Implementation Plan 30 days prior to the first OFT mission.

(2) Tasks. ADCOM will:

(a) Provide Early Orbit Determination (EODET), Tracking and Impact Prediction (TIP), and Computation of Miss Between Orbits (COMBO) support as specifically requested by NASA in reference].

(b) Prepare a separate detailed Implementation Plan outlining the specific tasking of the support described in paragraph (2)(a) above.

4. ADMINISTRATION AND LOGISTICS.

a. Concept of Support. Routine support for ADCOM day-to-day operations will be used.

b. Logistics. Routine support for ADCOM day-to-day operations will be used.

c. Personnel. Routine support for ADCOM day-to-day operations will be used.

d. Public Affairs. ANNEX F.

e. Communications. ANNEX K.

f. System Evaluation. ANNEX U.

JAMES V. HARTINGER

Lieutenant General, USAF

Commander in Chief

ANNEXES:

- A - Task Organizations
- B - Operations
- C - Public Affairs
- D - Communications - Electronics - Computer
- E - Operations Security
- F - System Evaluations
- G - Training and Exercises
- H - Distribution List

OFFICIAL: 
BRUCE K. BROWN Major General, USAF
SAC Operations (S-3)

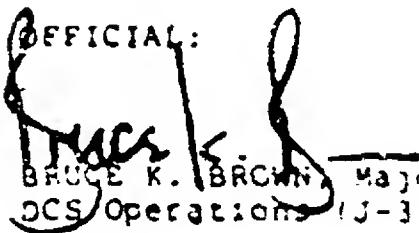
HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1981

ANNEX A TO CINCAD OPLAN 3410-8
TASK ORGANIZATIONS

<u>ORGANIZATION</u>	<u>COMMANDER</u>
ADCOM/J-3XS	CINCAD
ADCOM/J-3Y	CINCAD
ADCOM/PA	CINCAD
ADCOM/J-3Z	CINCAD
ADCOM/BCF	CINCAD
ADCOM/ASCC	CINCAD
ADCOM/J-3F	CINCAD
ADCOM/J-3J	CINCAD
ADCOM/KR	CINCAD

JAMES V. HARTINGER
Lieutenant General, USAF.
Commander in Chief

OFFICIAL:


BRUCE K. BROWN Major General, USAF
DCS Operations (J-3)

HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1991

ANNEX C TO CINCAD OPLAN 3410-81
OPERATIONS

1. SUPPORT CATEGORIES

This plan identifies areas of operation, addresses support in each major category, and assigns specific tasks and responsibilities where applicable. For each of the major support categories, refer to the appropriate section for amplifying information. Operational support provided to NASA by ADCOM, through the Space Operations Directorate (J-3Y), falls into the following major categories:

- a. Early Orbit Determination (EODET)
- b. Tracking and Impact Prediction (TIP)
- c. Computation of Miss Between Orbits (COMBO)

2. AREAS OF OPERATION

- a. Space Operations Directorate (J-3Y)
- b. Space Defense Operations Center (SPADOC)
- c. SPADOC Computation Center (SCC)
- d. Aerospace Defense Command Intelligence Center (ADIC)
- e. Missile Warning Center (MWC)
- f. ADCOM Command Post (CP)
- g. Space Detection and Tracking System (SPADATS)

3. EARLY ORBIT DETERMINATION (EODET):

EODET provides the user, upon request, with near-earth orbit insertion verification data. EODET support is normally requested by the user in the vehicle information message. The data is usually provided to the user verbally and includes time, azimuth, elevation, range, and range rate at acquisition, cross-over and termination. All voice data will be followed by a hardcopy message if appropriate.

4. TRACKING AND IMPACT PREDICTION (TIP):

Tracking and Impact Prediction satellites are those satellites that may survive reentry into the earth's atmosphere. Those objects that may survive reentry are payloads, rocket bodies, platforms, and pieces of debris larger than 1 square meter.

- a. The SPADOC Computation Center (SCC) has the mission of decay prediction for certain satellites as part of Project TIP.
- b. The TIP program provides specialized processing for the terminal phase of natural orbit decay. TIP output generated to aid the Tracking and Impact Prediction mission includes impact predictions, look angles and TIP alert messages.
- c. ADCOM will provide NASA with TIP support in the form of limited anomalous reentry data for the external tank.

5. COMPUTATION OF NIPS BETWEEN ORBITS (COMBO):

COMBO is an applications program used to calculate a close approach between a cataloged satellite of interest and other cataloged orbiting objects. ADCOM will provide NASA with COMBO support consisting of relative ephemeris points, relative minimum points, the absolute minimum point, periods of close proximity, or any combination of these, as specifically requested by NASA.

6. NASA will provide vectors according to support outlined in reference j and as subsequently negotiated between NASA and A/J-3Y.

JAMES V. HARTINGER
Lieutenant General, USAF
Commander in Chief

OFFICIAL:

Terence J. O'Rourke

TERENCE J. O'ROURKE, Lieutenant Colonel, USAF
Director, Space Operations

HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1981

ANNEX F TO CINCAD OPLAN 3410-81
PUBLIC AFFAIRS

1. SITUATION:

a. General. This section provides general guidance and outlines responsibilities concerning acquisition, handling and release of photographic, written and recorded materials.

b. Assumptions. Guidance on the release of information and response to news media inquiries will be provided by the Office of the Assistant Secretary of Defense, Public Affairs (OASD/PA).

2. MISSION. To inform the public of ADCOM's support of Space Shuttle operations.

3. EXECUTION:

Concept of Operations. Public Affairs activities will be carried out under the guidance and policy of OASD/PA. The responsibility for planning, coordinating and directing Public Affairs activities relating to ADCOM support of Space Shuttle operations will remain with the Director, ADCOM Public Affairs.

4. TASKS: ADCOM Director of Public Affairs will:

a. Provide Public Affairs liaison with lateral and higher headquarters.

b. Maintain coordination on the release of information with OASD/PA and the National Aeronautics and Space Administration office of Public Affairs.

c. The ADCOM Director of Public Affairs will serve as the office of primary responsibility for release of all public and internal information concerning ADCOM support of Space Shuttle operations in accordance with guidance provided by OASD/PA.

JAMES V. HAPTINGER
Lieutenant General, USAF
Commander in Chief

OFFICIAL:

Robert L. Watkins
ROBERT L. WATKINS, Colonel, USAF
Director of Public Affairs

HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1981

ANNEX K TO CINCAO OPLAN 1410-81
COMMUNICATIONS - ELECTRONICS - COMPUTER

1. GENERAL. THIS ANNEX describes the communications support, both existing and planned, to be used by ADCOM in support of the Space Shuttle missions. It also identifies the support required for ADCOM elements and establishes general operating procedures to be used during the execution phase of each mission.

2. EXECUTION:

Operational Concept. Communications requirements to fulfill NASA's requests for support are mission dependent and needed on test, exercise and evaluate ADCOM's shuttle support capability

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3. TASKS. ADCOM will:

No later than 1 Apr 81, provide secure teletype circuit Data Speed 40 for up to and including collateral secret.

JAMES V. HARTINGER
Lieutenant General, USAF
Commander in Chief

Appendix
1- Parallel Operations

OFFICIAL:

Winston D. Powers

WINSTON D. POWERS, Brigadier General, USAF
DCS/Communications, Electronics and Computer Resources

HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1981

APPENDIX I TO ANNEX F TO CINCPAD OPLAN 3430-6
PARALLEL OPERATIONS

REFERENCES: R/AR 33-48, 26 July 1980

1. PURPOSE. TO provide a **b5**

2. GENERAL.

b5

HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1981

ANNEX L TO CJNCAD OPLAN 3410-81
OPERATIONS SECURITY

REFERENCES:

- a. Joint Operations Planning System (JOPS) Vol I, ANNEX L
- b. JCS Pub 18 "Policy, Concepts, and Standards for Operations Security"
- c. N/AR 55-64, N/A Operations Security Guide
- d. AFR 55-30, Operations Security

1. GENERAL. Provide guidance for the secure planning and conduct of support functions as outlined in the mission of the basic plan.

2. RESPONSIBILITIES FOR OPSEC. OPSEC responsibility lies with the command. However, every individual associated with or aware of the OPLAN must assist in assuring protection of the planning, execution and post operation phases.

JAMES V. HARTINGER
Lieutenant General, USAF
Commander in Chief, Aerospace Defense Command

OFFICIAL:

Robert M. Wilshire
ROBERT M. WILSHIRE, Colonel, USAF
Director, Operations Plans

HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1981

ANNEX U TO CINCAD OPLAN 1410-81
SYSTEM EVALUATIONS

1. SITUATION: This section describes the evaluation support to be provided by ADCOM, and establishes general evaluation guidelines.
2. CONCEPT OF OPERATIONS: ADCOM will be prepared to evaluate, review and insure the adequacy of checklists, supporting plans, and crew performance.

3. TASKS: ADCOM will:

- a. Develop evaluation criteria for the purposes of improving/evaluating space shuttle support training programs, and to assess the operational readiness of assigned crews/individuals.

65

4. Review exercise scenarios, lesson plans, lectures, training aids, and visual aids.

65

JAMES V. HARTINGER
Lieutenant General, USAF
Commander in Chief

OFFICIAL:

Charles B. Beall Jr.
CHARLES B. BEALL, Jr., Lieutenant Colonel, USAF
Director, Standardization and Evaluation

U-1
(REVERSE SIDE)

HEADQUARTERS, AEROSPACE DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 March 1981

ANNEX Y TO CINCAD OPLAN 3410-81
TRAINING AND EXERCISES

1. SITUATION: This section describes the planned training/exercise support to be provided by ADCOM, and establishes general operating procedures which will be used during the execution of each mission.

2. CONCEPT OF OPERATIONS:

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3. TASKS: ADCOM will:

a. Develop/modify operations training to satisfy any special/additional requirements specified in this plan.

b. Develop exercises, lesson plans, lectures, training aids, and visual aids necessary to satisfy the above.

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JAMES V. HARTINGER
Lieutenant General, USAF
Commander in Chief

OFFICIAL:

John W. Yocom
JOHN W. YOCOM, Colonel, USAF
Director, Training and Exercise

HEADQUARTERS, AFROSPAC DEFENSE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914
6 MARCH 1981

ANNEX 2 TO CINCAU OPLAN 3410-81
DISTRIBUTION

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Johnson Space Center, D8AD	1
Johnson Space Center, fm 45	1
Johnson Space Center, fm 2	1
Johnson Space Center, DDMS-H	1
Johnson Space Center, MCC	4
Johnson Space Center, CF3	2
Western Space and Missile Center	2
Eastern Space and Missile Center	2
OTHER	
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FASTMAC-ROPN	1
Space Division, CC	1
Space Division, 4V	1
SAMTO, CC	1
HQ AFTEC, CO	1
AFSC/DO	1
HQ SAC, CO	2
HQ SAC, XP/SX	2 ea
FAA-ATC System Command Center	2
ADCOM ALCOM, Malmstrom AFB MT	1
20 MWS Eglin AFB FL	1
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JAMES V. HARTINGER
Lieutenant General, USAF
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Robert M. Wilshire
ROBERT M. WILSHIRE, Colonel, USAF
Director, Operations Plans